WHAT IS CLAIMED IS:

1. A signal generator using an IIR type digital filter having multipliers in a feedback loop, wherein

said signal generator includes a control unit which changes coefficients of said multipliers, and

said control unit changes said coefficients to predetermined values and stops an output signal while maintaining a frequency of said output signal.

2. A signal generator using an IIR type digital filter having multipliers in a feedback loop, wherein

said signal generator includes a selector to select a predetermined one of a plurality of set values which have been preset as coefficients of said multipliers, and

said predetermined value is selected and output of an output signal is stopped while maintaining a frequency of said output signal.

3. The generator according to claim 1 or 2, wherein

in said predetermined value, poles of a transfer function of said IIR type digital filter are set to an inside of a unit circle on a Z plane.

4. The generator according to claim 3, wherein

in the poles of said transfer function,

a ratio of a value on an imaginary axis to a value on a real axis of said poles before said coefficients are changed and that after the change of said coefficients are set to an equal value.

5. An output stopping method of a signal generator using an IIR type digital filter having multipliers in a feedback loop, comprising the steps of:

changing coefficients of said multipliers while said signal generator is outputting a desired signal and stopping the output of said desired signal.

6. The method according to claim 5, wherein

upon change of the coefficient of said multiplier, poles of a transfer function of said IIR type digital filter are moved to an inside of a unit circle on a Z plane.

7. The method according to claim 6, wherein

upon movement of the poles of said transfer function, the poles are moved while a ratio of a value on an imaginary axis to a value on a real axis of said poles before said coefficients are changed and that after the change of said coefficients are maintained at an equal value.